## STATE PRIORITY 7: EXPLOSIVE ORDNANCE DISPOSAL CAPABILITY

# A. Accomplishments

The implementation and strategic planning efforts for Iowa's (EOD) Bomb Squad Task Force Program have been an ongoing process spanning four years of assessing capabilities, reviewing national guidance, holding local and regional discussions, consulting and exercising with other response task force groups and disciplines, in order to develop a comprehensive and coordinated all-hazards planning approach to serve the State of Iowa.

Iowa's (EOD) Bomb Squad Task Force Program is built upon the foundation of existing nationally accredited bomb squads. The bomb squads were developed in the seventies and eighties around the larger metropolitan areas, to address actual bombing events and increasing demands for bomb response by local governments. Each bomb squad is staffed with nationally certified bomb technicians and each squad possessed a significant base response capability.

Iowa's (EOD) Bomb Squad Task Force Program was established to enhance the capabilities of existing bomb squads to provide statewide coverage for detection, response, assessment and render-safe operations involving a wide variety of explosive materials and increasingly sophisticated improvised explosive devices (IED's), vehicle borne explosive devices (VBIED's) remote controlled improvised explosive devices (RCIED's), suicide bombers or those that may contain other chemical, biological or radioactive materials (Dirty Bombs).

### National Preparedness Goal and Iowa Homeland Security & Emergency Management Strategy:

On December 17, 2003, the President signed Homeland Security Presidential Directive - 8 (HSPD-8) which established the National Preparedness Goal. The National Preparedness Goal defines National Priorities, National Planning Scenarios, Target Capabilities List (TCL) and Universal Task List (UTL). Among the National Planning Scenarios are; Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Attacks that may involve the use of explosive materials as delivery systems or improvised explosive devices, and Target Capability and Universal Task List descriptions for "Explosive Device Response Operations, CBRNE Detection and Critical Infrastructure Protection" to address the prevent, protect and response missions areas to mitigate explosive threats.

Based on the requirements of HSPD-8, Iowa Homeland Security and Emergency Management wrote the "Iowa Homeland Security Strategy: Envisioning the Future", which has been updated annually. "FY 2004 The Iowa Homeland Security Strategy (Condensed)" Objective 5.5 Page 25, and "FY 2005 The Iowa Homeland Security Strategy" Objective 5.5 Page 29, and The Iowa Strategy for Homeland Security and Emergency Management 2006-2008 Objective 1.2 Page 27, identify Explosive Ordinance Disposal (EOD) among the response capabilities and capacities to be expanded and supported by the State.

#### **Bomb Squad Task Force Standards**

National "Accreditation and Certifications Standards" are established by the National Bomb Squad Commander's Advisory Board, the Federal Bureau of Investigation Bomb Data Center and Hazardous Device School. The standards are published in the National Strategic Plan for U.S. Bomb Squads (Revised 12/2006), FBI - Bomb Data Center National Guidelines for Bomb Technicians (Revised 4/2006) and the NIMS Resource Typing Document for Bomb Squad / Explosives Teams (Revised 3/2007). The standards include, bomb squad responsibilities, bomb technician selection, training and certification, bomb squad accreditation, bomb squad equipment, operational response guidelines, safety principles and bomb response plans.

#### Iowa's (EOD) Bomb Squad Task Force Program Governance Structure

Iowa's Bomb Squad Task Force is governed by a "Leadership Committee" comprised of the Bomb Squad Commander from each of the participating Task Force Divisions (Bomb Squads) and a representative from Iowa Homeland Security and Emergency Management Division. The Task Force Leadership Committee is responsible for developing response protocols, identifying equipment and training needs, establishing program budgets, equipment specifications, and approving expenditures.

The Task Force Leadership Committee also promotes participation in regional and statewide joint and multi-discipline training and exercise opportunities. The Task Force Leadership Committee members are responsible for keeping their respective jurisdictions and Iowa Homeland Security informed of Task Force matters and for the completion of grant program reporting requirements.

### Iowa's (EOD) Bomb Squad Task Force Notification, Mobilization and Demobilization

State notification, mobilization and demobilization of a Task Force Division for "State activations" are managed by the Duty Officer of Iowa Homeland Security and Emergency Management Division. The communications centers and commanders for the individual Bomb Squads, generally handle all local and regional responses.

Upon mobilization, the Task Force Division Commander reports to the requesting jurisdiction's Incident Commander for briefing and assignment of mission tasks, under the established incident or unified command structure. Decisions regarding the tactics and oversight of the task force assets and render-safe operations, rest with the Task Force Division (Bomb Squad) Commander.

We have demonstrated success with this program and the organizational structure that has been established for the implementation, oversight and deployment of Iowa's Bomb Squad Task Force resources.

# **Iowa's (EOD) Bomb Squad Task Force Program Timeline of Accomplishments**

# During Fiscal Year 2004 (October 01, 2003 – September 30, 2004)

- "Iowa Homeland Security Strategy: Envisioning the Future" was written and included Explosive Ordinance Disposal (EOD) among the response capabilities and capacities to be expanded and supported by the State.
- A committee was formed to work on the State's objective to; "expand response capabilities and capacity for EOD response in Iowa". The committee's charge was to determine the capabilities that existed and those needed in order to respond to improvised explosive devices and bombing incidents in Iowa.
- Following the preliminary committee work, the Iowa Department of Public Safety (DPS) contracted with the State Public Policy Group (SPPG) to formalize a planning process to develop an implementation strategy.

# During Fiscal Year 2005 (October 01, 2004 – September 30, 2005)

- SPPG Task Force Meetings were held from October 2004 to May 2005. The meetings included extensive reviews of the FBI Hazardous Device School (HDS) "Guidelines for Bomb Technicians", the National Bomb Squad Commanders Advisory Board's "National Strategic Plan for US Bomb Squads", and the National Incident Management (NIMS) "Resource Typing Document" for Bomb Squads / Explosives Teams.
- Group consensus and general statewide support was achieved on a number of issues.
  - The decision was to build upon the existing response capabilities by investing in the eight (8) existing local and state bomb squads located geographically across the state, near significant population centers.

- Emphasis was placed on bringing all of the bomb squad operations to the same base level of
  equipment and training to ensure all technicians could remain certified and individual squads would
  remain nationally accredited.
- Established priorities which included; the standardization of equipment among the squads for
  interoperability during response operations, enhancement in the ability for technicians to operate in
  contaminated "CRBNE" environments, and to increase the availability of current technologies to all
  of the bomb squads.
- The Strategic Plan for Iowa's (EOD) Bomb Squad Task Force Program was vetted through a series of six statewide public hearings convened by the State Public Policy Group, and meetings with Iowa Homeland Security and Emergency Management's "First Responder Advisory Committee" (Representatives of Iowa's professional associations and public agencies) and the State's "Executive Council".
- Iowa Homeland Security & Emergency Management and each Bomb Squad signed a "Letter of Intent" to participate in Iowa's (EOD) Bomb Squad Task Force Program, while additional work was being conducted to amend the Iowa Code and develop a formal Iowa (EOD) Bomb Squad Task Force Program Agreement.
- Iowa's (EOD) Bomb Squad Task Force Leadership Committee established standards and specifications for interoperability of equipment, and purchasing procedures and reporting processes.
  - Each bomb squad received a full coverage bomb suit to enhance the ability for technicians to operate
    in contaminated "CRBNE" environments in accordance with the "National Strategy for U.S. Bomb
    Squads", "National Guidelines for Bomb Technicians" and NIMS Resource Typing Document for
    Bomb Squads / Explosive Teams.
  - Each bomb squad received digital x-ray film and processing equipment to replace the "wet x-ray film" being discontinued by Polaroid.
  - Three existing multifunction robotics platforms (City of Des Moines, Quad Cities and Iowa Fire Marshall's Office) were upgraded to the requirements of the "Iowa Standardized Multi-function Robotics Platform" and three new multifunction robotics platforms (City of Cedar Rapids, Pottawattamie County and City of Waterloo) were purchased in accordance with the priority to place robotics platforms geographically across the state and the "National Strategy for U.S. Bomb Squads" requirement for each bomb squad to have a robot by 2009.

# During Fiscal Year 2006 (October 01, 2005 – September 30, 2006)

- The Iowa Legislature amended Iowa Code Section 29C.8, Powers and duties of administrator, Subsection f, giving the Homeland Security and Emergency Management Administrator the authority to approve and support the development and ongoing operations of the state's emergency response teams, the conditions and authority upon which they may be deployed, protections for purposes of liability, indemnification and worker's compensation claims, and a provision for filing expense claims associated with a "state" activation and response.
- Iowa's (EOD) Bomb Squad Task Force Leadership Committee established specifications for equipment and initiated purchasing of;
  - The last two multi-function robotics platforms were purchased for Johnson County Metro and Linn County-Marion to ensure they remained nationally accredited in accordance with the "National Strategy for U.S. Bomb Squads" requirement for each bomb squad to have a robot by 2009.
  - Enclosed trailers were purchased for five of the bomb squads to transport their multifunction robotics platforms and accessories.

- Recoil adapters were purchased for the bomb disruptors to prevent stress fractures on the
  multifunction robotics platforms, following the receipt of technical reports on damage from bomb
  disruptor deployments on the robotic platforms mechanical arms.
- Fiber Optics Scopes to allow for non-intrusive inspection of the interiors of various types of
  containers and rooms for assessment of suspect devices and to support render-safe operations were
  acquired in accordance with the NIMS Resource Typing Document for Bomb Squads / Explosive
  Teams.
- Standardized rope rigging equipment for all of the bomb squads to increase interoperability between squads for conducting complex bomb render-safe operations were acquired in accordance with the NIMS Resource Typing Document for Bomb Squads / Explosive Teams.
- Self contained breathing apparatus (SCBA) were acquired to enhance the ability for bomb technicians to operate in contaminated "CRBNE" environments "National Strategy for U.S. Bomb Squads", "National Guidelines for Bomb Technicians" and NIMS Resource Typing Document for Bomb Squads / Explosive Teams.

# During Fiscal Year 2007 (October 01, 2006 – September 30, 2007)

- Iowa Homeland Security & Emergency Management and the members of Iowa's (EOD) Bomb Squad Task Force Program developed and signed the Iowa (EOD) Bomb Squad Task Force Program (28E) Agreements to formalize task force program operations.
- Iowa Homeland Security & Emergency Management established oversight of the State's Emergency Response Teams in Iowa Administrative Code Chapter 12, with rules for the creation, application and approval requirements, as well as, the use, activation, deployment and expense compensation for the State Homeland Security and Emergency Response Teams.
- U.S. Homeland Security's "Inventory of State and Local-Level Programs Related to Improvised Explosive Devices (IEDs)" was completed and submitted.
- Iowa's (EOD) Bomb Squad Task Force Leadership Committee established specifications for equipment and initiated purchasing of;
  - Computers for the digital x-ray processors to store and manipulate multiple images, and wirelessly transmit the images to other resources such as; other state and local bomb squads, the FBI Bomb Data Center, Hazardous Device School or the ATFE Laboratory, for on-scene operational support during render-safe operations.
  - Advanced explosive device disablement and disruption tools were acquired to support remote entry and disruption of suspect devices in accordance with the NIMS Resource Typing Document for Bomb Squads / Explosive Teams.
  - Radiological monitor for each bomb squad and personal dosimeters for each bomb technician and bomb detection canine team, were acquired to support early detection of radiological materials and potential dirty bombs, in accordance with the; "Iowa Strategy for Homeland Security and Emergency Management 2006-2008", "National Strategy for U.S. Bomb Squads" and "National Guidelines for Bomb Technicians" for each bomb squad to have radiation detection capabilities.
  - Chemical agent detection papers were acquired for evaluating suspect materials during the assessment and render-safe of suspect items and improvised explosive devices.
  - Bomb disrupters were acquired for each bomb squad in accordance with the revised "National Strategy for U.S. Bomb Squads" and revised "National Guidelines for Bomb Technicians" requirement for each bomb squad to have a second bomb disruptor by 2009.

- Full coverage CBRNE complaint bomb suits were acquired in accordance with the revised "National Strategy for U.S. Bomb Squads" and revised "National Guidelines for Bomb Technicians" requirement for each bomb squad to have a second bomb suit by 2009.
- Self contained breathing apparatus (SCBA) were acquired in accordance with the "National Strategy for U.S. Bomb Squads", "National Guidelines for Bomb Technicians" and NIMS Resource Typing Document for Bomb Squads / Explosive Teams.

## Importance of Iowa's (EOD) Bomb Squad Task Force Program

State and local agencies have been involved in the prevention, detection, protection against, and response to terrorist's use of explosives in Iowa, since the late 1960's. Iowa has not been immune from the political, social, criminal and terrorist activities that have resulted in the theft of explosives, placing and receiving of bomb threats, and actual bombing events resulting in property damage, injuries and deaths. State and local agencies developed their bomb squad programs out of necessity, beginning in the 1970's, to address increases in the threatened and actual use of improvised explosive devices (IED's).

Since their inception, Iowa's bomb squads have responded to actual bombings of government buildings, universities, schools, utilities and private businesses. Recent investigations include Harry Barber, dubbed the "Tuesday Bomber" by the media, for planting multiple pipe bombs in a deranged plan to cover the (attempted) murder of his wife. A pipe bomb sent through the U.S. Mail in 2005, was intercepted and rendered-safe before it killed the intended recipient. Another pipe bomb detonated in a vehicle headrest, as the victim started her car, resulting in serious injuries, in 2006.

Iowa has also received national attention for several high profile bombing cases. The "Midwest Bank Bombers" (Aryan Republican Army) carried out bomb extortion – bank robberies in Iowa. Luke Helder the "Happy Face Bomber" planted five devices in Iowa mailboxes, in 2002. John Tompkins the "Bishop Bomber" who built and mailed sixteen explosive devices over two years, was arrested in near his home in Dubuque, Iowa April 2007, where more devices were discovered.

Iowa recognizes the continued use of explosives as the "number one terrorist tool" being deployed throughout the world, our nation and within Iowa. We realize explosive related events are dynamic, and the expansion into the "dirty bomb" mindset of combining explosives with other chemical, biological, radiological, and enhanced novel energetic materials are being deployed to increase the numbers of injured, killed and to heighten the psychological impact of such incidents.

Iowa Homeland Security and Emergency Management continues to partner with federal, state, regional and local agencies to maintain situational awareness, and use the information to identify and deploy strategies to enhance and sustain bomb squad operations across the State. We recognize that prevention and early detection is dependent upon the collaboration and cooperation of state, regional and local agencies, with our public and private business partners across all critical infrastructure sectors.

Response begins at the local level, and our success is based on the timely response and actions of properly equipped, trained and exercised bomb squads, meeting federal accreditation standards and bomb technician and explosive detection canine team certifications. The state, regions and local agencies are all working together to enhance and maintain the operational readiness of the state's bomb squads and the other emergency response team capabilities, to respond at a moments notice, to CBRNE threats presented in the State of Iowa, or in support of our bordering states and their large urban areas.

### **B.** Current Capabilities

#### Iowa's (EOD) Bomb Squad Task Force Program

The strength of Iowa's Bomb Squad Task Force Program is based in the fact that it was established by building upon the foundations of agencies already possessing a significant base capability. Iowa already

had eight (8) existing federally accredited bomb squads, staffed with FBI - Hazardous Device School (HDS) certified technicians with years of experience in improvised explosive device render-safe operations. Since the 1990's, HDS has been training bomb technicians in render-safe operations involving improvised explosive devices and Weapons of Mass Destruction (WMD) materials.

Iowa is building National Incident Management System (NIMS) - Type II Bomb Squads. NIMS Type II Bomb Squads are capable of handling a moderate incident, including; life-threatening or time-sensitive incidents involving sophisticated improvised energetic materials and electronic/remote firing systems. Iowa's Bomb Squads have render safe capabilities up to and including a medium vehicle borne improvised explosive device (VBIED) capable of containing up to 4,000 lbs. of explosive material and CBRN dispersal devices. They are capable of working in a CBRN environment absent of vapors.

Iowa's (EOD) Bomb Squad Task Force Program is fully operational and ready for deployment anywhere in the State as requested. Statewide coverage is provided with seven (7) local and one (1) state bomb squad, for a total of eight (8), nationally recognized and accredited bomb squads. The most recent survey of Iowa's Bomb Squads identified forty-eight (48) federally certified bomb technicians and five (5) certified explosive detection canine teams in the State. Iowa's (EOD) Bomb Squad Task Force Program participants are identified as;

- Iowa State Fire Marshall's Office
- City of Cedar Rapids
- City of Des Moines
- Johnson County Metro
- Linn County City of Marion
- Pottawattamie County
- Ouad Cities
- City of Waterloo

### **Bomb Squad Task Force Training**

Bomb Technician and Explosive Detection Canine Team training represents a significant initial and on going commitment. Most of Iowa's Bomb Squads have been able to meet the national standards for bomb technician and explosive detection canine team requirements. The courses and national training requirements are outlined below:

- Hazardous Materials Technician Level Course Initial Training (40 hours)
- Hazardous Materials Technician Level Annual Refresher Course (8 hours)
- Basic Hazardous Device Course, including WMD and Robotics (240 hours)
- Bomb Technician Re-certification Every 3-Years (40 hours)
- Advanced Post Blast Investigation, Access and Disablement, Explosive Breaching, and individual Training on CBRNE Specialties (40 hours Each)
- Monthly Training (16 hours) and Continuous Annual Training (40 hours)
- Extensive training with X-ray, bomb disrupter, rope rigging, robotics platforms, demolition equipment, live explosives, threat identification and render-safe operations, and wearing of personal protective equipment
- Explosive Detection Canine Program (ATFE EDCP 400 hours initial training)
- Explosive Detection Canine Program Annual Re-certification

Some squads have participated in New Mexico Tech's federal "Preventing and Responding to Suicide Bombing Incidents" Course, Louisiana State University's federal "WMD Tactical Operators Basic, Advanced and Commanders Courses" and the FBI - Explosives Unit's "Bomb Squad Commanders Conference."

# **Bomb Squad Task Force Equipment**

Each bomb squad is equipped with the minimum basic response tools to remain accredited in accordance with current national standards. We have incrementally been working towards addressing the needs identified during our continued strategic planning discussions, in accordance with the revised "National Strategy for U.S. Bomb Squads", revised "National Guidelines for Bomb Technicians", "NIMS Resource Typing Guide for Bomb Squads / Explosive Teams", and the Target Capabilities List. We have combined local, regional, state and federal Homeland Security Grant Program funds to bring Iowa's Bomb Squad Task Force Program participants, to a common "CBRNE" response capability.

### **Bomb Squad Task Force Operations**

State and local bomb squads continue to respond to over one hundred calls each year, directly related to the discovery of suspicious items, explosive materials and improvised explosive devices, each requiring evaluation, investigation and many requiring the performance of bomb render-safe actions. We continue to experience bomb threats on federal, state and local government facilities, university and school campuses, health care facilities, family planning clinics, public and private utilities, and many other local businesses and targeted individuals.

State and local bomb squads provide bomb incident management and improvised explosive device training to first responders and private security operations. They also meet with government agencies, schools, public and private business partners to provide improvised explosive device awareness training, and to review agency, school and business emergency response plans, and to participate in joint exercise activities with government agencies and private businesses.

## C. Three-Year Targets

Target Description	Projected Completion Year	Status
Acquire forty-six (46) "Chemical Protective Suits" to be worn with bomb suits to provide bomb technicians with Modified	2008	Open
Level-B protection against chemical and biological materials.		
Provide joint "CoBRA" software training for two representatives from each Bomb Squad and two representatives from each WMD Tactical Team.	2008	Open
Acquire eight (8) "Electronic Counter Measures" equipment for each bomb squad to address the threat of radio controlled improvised explosive devices (RCIED's) in accordance with the Target Capabilities List for Explosive Device Response Operations.	2008	Open
Iowa Homeland Security & Emergency Management will into a Sub-grantee Agreement with the City of Des Moines on behalf of Iowa's (EOD) Bomb Squad Task Force Leadership Committee to administer the FY2007 HSGP Funds.	2008	Open
Acquire "Digital Radio System Upgrades" for the eight (8) Remotec Andros F6-A Robots to address deficiencies noted in the use of multiple robotics platforms at one location, and	2009	Open

remote operations at greater distances or inside of structures built with dense construction materials.		
Acquire eight (8) "In-suit Communications Systems" for the EOD-9 Full-Coverage Bomb Suit and Command, with a minimum capability of three-way communication, allowing hands free, fully duplexed, in-suit communications for two technicians and reach back capability to command.	2009	Open
Conduct joint training and a progression of exercised response activities over three years by the composite of all Iowa Emergency Response Teams as a coordinated and cohesive task force, deployed against the full spectrum of CBRNE Threats.	2010	Open
Acquire eight (8) "Universal Blast Containment Systems" and Sandia Foam to address improvised devices suspected of containing a chemical, biological or radioactive materials, in order to keep the substances from becoming airborne and to mitigate the effects of chemical and biological agents.	2010	Open
Review the National Accreditation of each Bomb Squad for compliance with national standards and Iowa's (EOD) Bomb Squad Task Force Agreements.	2010	Open

### D. Initiatives

# **Initiative Descriptions**

The initiatives will address the current weaknesses and issues identified within our strategic planning for the Iowa (EOD) Bomb Squad Task Force Program, as explained below;

- Purchase forty-six (46) sets of "Chemical Protective Suits" to be worn with bomb suits will provide bomb technicians with a Modified Level B protection against chemical and biological materials is currently in progress using FY2005 HSGP funds. We are purchasing NFPA 1992 "Liquid Splash" Personal Protective Equipment (PPE) coveralls for protection against liquid hazardous chemical / biological materials, to be worn under the blast protection of the Med-Eng EOD-9 Suits, to create a modified Level B Ensemble in accordance with the "National Strategy for U.S. Bomb Squads", "National Guidelines for Bomb Technicians" and NIMS Resource Typing Document for Bomb Squads / Explosive Teams.
- The joint "CoBRA" software training for two representatives from each Bomb Squad and two representatives from each WMD Tactical Team is currently being scheduled for January 2008, using FY2006 HSGP funds. CoBRA Command Kits are currently being used by all of Iowa's Bomb Squad Task Force Teams (Purchased by the FBI for accredited Bomb Squads), and were purchased for each of Iowa's WMD Tactical Task Force Teams with HSGP Program funds. The joint training is being provided to bring members of Iowa's Bomb Squad and WMD Tactical Task Force Programs together for familiarization with the operational features and emergency response guides provided with the CoBRA software.
- Purchase eight (8) "Electronic Counter Measures" equipment was approved by the Bomb Squad Task Force Leadership Committee in November 2007, in accordance with the Target Capabilities List for "Explosive Device Response Operations". The purchasing process for the Electronic Counter Measures equipment is currently in progress using FY2006 HSGP funds.
- Iowa Homeland Security & Emergency Management will enter into a Sub-grantee Agreement with the City of Des Moines on behalf of Iowa's (EOD) Bomb Squad Task Force Leadership Committee

to administer the FY2007 HSGP funds. The sub-grantee program meeting is scheduled for December 2007, which will be followed by a presentation to the Des Moines City Council for acceptance and signatures by January 2008.

- Purchase "Digital Radio System Upgrades" for the eight (8) Remotec Andros F6-A Robots to address the ability for remote operations at greater distances and inside of structures built with dense construction materials. We have identified issues when deploying the multi-function robotics platforms over greater distances using fiber optic lines, which become snagged on obstructions and in doorways, as well as with the analog radio systems that when deployed from behind substantial shielding to protect the operator or inside of heavy masonry or metal buildings, begin to loose their video and telemetry signals. Funding has been approved in the FY2007 HSGP to make this purchase.
- Purchase eight (8) "In-suit Communications Systems" for the EOD-9 Full-Coverage Bomb Suit and Command, with a minimum capability of three-way communication, allowing hands free, fully duplexed, in-suit communications for two technicians and reach back capability to command. We currently do not have capability for voice communications between bomb technicians dressed out in full coverage bomb suits and their command element. We are unable to pass critical information between the technicians and support personal during render-safe operations, beyond a few hand signals during line-of-sight operations, which is not acceptable, especially during complex operations, or when technicians are not in-view of each other or command. In-suit Communications System is a requirement of the NIMS Resource Typing Document for Bomb Squads / Explosive Teams and \$240,000 in funding is being sought to make this acquisition.
- Conduct joint training and a progression of exercised response activities over three years, by the composite of all Iowa Emergency Response Teams as a coordinated and cohesive task force, deployed against the full spectrum of CBRNE Threats. The effort is necessary to educate the State's Emergency Response Teams on the capabilities of each Task Force Program, to integrate response plans and provide a comprehensive exercise program as a mechanism to test the integration of all response team assets. The initial steps will require several planning meetings to coordinate the effort, identify the estimated costs and identify a source of funding.
- Purchase eight (8) "Universal Blast Containment Systems and Sandia Foam" to address improvised devices suspected of containing a chemical, biological or radioactive materials, in order to keep the substances from becoming airborne and to mitigate the effects of chemical and biological agents that may be inadvertently released during a render-safe operation. \$320,000 in funding is being sought to make this acquisition.
- The review the National Accreditation of each Bomb Squad for compliance with national standards and Iowa's (EOD) Bomb Squad Task Force Agreements will occur as a continuous cycle of administrative review and task force program oversight.

#### Geographical Scope

The State of Iowa has regional and statewide coverage for explosive device response operations provided by eight (8) local and state bomb squads. The Quad Cities Bomb Squad is a composite of Iowa and Illinois Bomb Squads operating in the Quad Cities Area, and the Pottawattamie County Sheriff's Office has worked cooperatively with Omaha, Nebraska's Bomb Squad.

Participants in Iowa's Bomb Squad Task Force provide response capabilities for local and regional areas through local and regional agreements, without necessarily invoking a "State" activation through a Governor's Declaration of Disaster. The Bomb Squads may be deployed locally through agency to agency mutual aid agreements, or between local and regional jurisdictions through Iowa's Mutual Aid Compact (IMAC).

Iowa's Bomb Squad Task Force Program provides the State of Iowa with a "state resource" to be activated by Iowa's Department of Public Defense, through Iowa Homeland Security and Emergency Management Division, for declared emergencies within the State of Iowa.

The State of Iowa may activate one or more Task Force Divisions (Bomb Squads) through mutual agreement with the sponsoring organization of the Task Force Division for an Emergency Management Assistance Compact (EMAC) response. EMAC allows the State of Iowa and participating Task Force Divisions to provide interstate mutual aid for federally declared disasters or crisis response to states or cities, outside of the State of Iowa.

#### Iowa (EOD) Bomb Squad Task Force Program (28E) Agreements and Administrative Rules

Iowa Homeland Security & Emergency Management and each member of Iowa's (EOD) Bomb Squad Task Force Program signed the Iowa (EOD) Bomb Squad Task Force Program (28E) Agreement to formalize task force program operations. Iowa Homeland Security & Emergency Management established oversight of the State's Emergency Response Teams in Iowa Administrative Code Chapter 12, with rules for the creation, application and approval requirements, as well as, the use, activation, deployment and expense compensation for the State Homeland Security and Emergency Response Teams.

### **Iowa (EOD) Bomb Squad Task Force Program Management**

Iowa's Bomb Squad Task Force is governed by a "Leadership Committee" comprised of the Bomb Squad Commander from each of the participating Task Force Divisions (Bomb Squads) and a representative from Iowa Homeland Security and Emergency Management Division. The Task Force Leadership Committee is responsible for developing response protocols, identifying equipment and training needs, establishing program budgets, equipment specifications, and approving expenditures.

The Task Force Leadership Committee also promotes participation in regional and statewide joint and multi-discipline training and exercise opportunities. The Task Force Leadership Committee members are responsible for keeping their respective jurisdictions and Iowa Homeland Security informed of Task Force matters and for the completion of grant program reporting requirements.

The State of Iowa has partnered with the City of Des Moines as the sub-grantee for the management and administration of the equipment acquisitions, training and coordination of Federal Homeland Security Grant Program funds allocated to Iowa's (EOD) Bomb Squad Task Force Program. All activities are brought forward to and approved by the Task Force Leadership Committee prior to the expenditure of funds.

### E. Resources (Expended FY 2007)

## Local and State Program Funds Supporting Iowa's (EOD) Bomb Squad Task Force Program

#### **Personnel Costs:**

Iowa's bomb squads are predominately staffed with part-time "ad hoc" members, who come together for scheduled training and in response to emergency calls for service, but have other full time duties and responsibilities within their respective agencies. Within the past two years, two agencies have been able to assign a full-time bomb technician and one agency has assigned full-time explosive detection canine teams to perform duties within their communities for an annual total salary cost of \$542,000 dollars.

#### **Operating Budget Costs:**

Most bomb squads have very small annual operating budgets established for maintaining the daily operation of their bomb squad capability. The combined total for the annual operation of all eight bomb squads totals \$115,700 dollars and does not including the full-time salaries identified above. Given the current financial situation of state and local governments, and other priorities within governments and departments for dollars, we are not expecting to see any substantial increase in the current state or local allocations to sustain bomb squad operations for several years.

## **Training & Exercise Costs:**

Most of Iowa's bomb squads have been able to meet the minimum training standards established in the FBI - Bomb Data Center National Guidelines for Bomb Technicians and the later guidance in the National Strategic Plan for U.S. Bomb Squads. The training costs and participation in local, regional and state exercise programs is handled within the existing agency budgets without support of grant funding. Iowa's forty-eight (48) bomb technicians participate in over 8,400 hours of training annually, at an estimated cost of over \$243,800 dollars to the respective agencies. Several bomb squads have rescheduled training days to facilitate participation in joint local, regional or state exercise opportunities.

While the FBI provides the Basic Hazardous Device School and the Bomb Technician Re-certification Courses at no cost to state and local agencies, state and local agencies must pay the costs associated with travel and per diem for sending a bomb technician to the initial bomb technician basic course. The travel and per diem costs borne by state and local agencies for sending an officer to be certified as a bomb technician, represents an estimated expenditure of \$6,000 dollars, for attending the six week course. Iowa has sent at least two (2) public safety employees to be certified as bomb technicians in the past year representing an additional training cost of \$12,000 dollars.

#### **Annual State and Local Costs:**

Given the \$542,000 in salaries for fulltime personnel, \$115,700 in agency operating budgets, \$243,808 dollars for agency sponsored training and exercises, \$12,000 dollars for initial bomb technician training, and \$16,000 in other funding, local and state agencies have funded the base capability for Iowa's (EOD) Bomb Squad Task Force Program over the FY2007 reporting period, October 01, 2006 through September 30, 2007, an estimated \$929,508 dollars of state and local funding was expended to maintain the base capability of Iowa's Bomb Squads.

# Federal Program Funds Supporting Iowa's (EOD) Bomb Squad Task Force Program

Federal grant program funds are used primarily to fund federal training programs and equipment acquisitions to enhance the capabilities of Iowa's Bomb Squads. Salaries, local training and operating costs are borne by state and local governments as identified above.

## **FY2007 Training:**

Given the turnover in personnel assigned to Iowa's (EOD) Bomb Squad Task Force Program, we have sent public safety employees to attend the "FBI- Basic Hazardous Device School" to become certified as bomb technicians. There is also a national requirement for the re-certification of bomb technicians every three-years, and Iowa sends a number of bomb technicians to the "FBI – Bomb Technician Recertification Courses" each year. Iowa's bomb squad commanders are also invited to participate in the FBI - Explosives Unit's "Bomb Squad Commanders Conferences".

Several bomb squads have been able to participate in Office of Domestic Preparedness (ODP) approved courses to include the; "Preventing and Responding to Suicide Bombing Incidents" Course, Louisiana State University's "WMD Tactical Operators Basic, Advanced and Commanders Courses", and the FBI's" Large Vehicle Bomb Post Blast Crime Scene School"

The City of Des Moines sent three officers to the ATFE – Explosive Detection Canine Program (EDCP) to receive their canine partners and to become certified handlers. The program provides the base ten-week handler training course, the canine, basic equipment, travel and per diem for the trainee.

The actual cost to the federal agencies providing these courses or the broken out cost per participant is not known, and therefore the actual dollar value cannot be reported. The assets, courses and conferences are extremely important to the continued operation of Iowa's (EOD) Bomb Squad Task Force Program and every effort should be made to assure continued federal funding for these important training programs.

## FY2007 Equipment:

The individual equipment acquisitions and training for Iowa's (EOD) Bomb Squad Task Force Program using Homeland Security Grant Program funds were described in "Section A. Accomplishments". Below is a brief synopsis of the FY 2007 acquisitions.

FY2007 HSGP Acquisitions	
Description	Amount
Computers for the digital x-ray processors	\$43,784
Advanced explosive device disablement and disruption tools	\$6,940
Radiological monitor for each bomb squad and personal dosimeters for each bomb technician and explosive detection canine team	\$37,632
M-8 and M-9 Chemical agent detection papers	\$743
Bomb disrupters in accordance with "National Strategy for U.S. Bomb Squads" requirement to have a second bomb disruptor by 2009	\$21,000
Full coverage CBRNE complaint bomb suits in accordance with "National Strategy for U.S. Bomb Squads" requirement to have a second bomb suit.	\$117,966
Self contained breathing apparatus (SCBA) in accordance with "National Strategy for U.S. Bomb Squads" requirement to have SCBA's with each suit.	\$23,740
Total	\$251,805

# **Resources (Future)**

The State of Iowa has allocated Homeland Security Grant Program funds with the FY2005, FY2006 and FY2007 Grant Programs to Iowa's (EOD) Bomb Squad Task Force Program, to make several acquisitions that due to a number of issues have either; occurred after September 30, 2007, are currently in progress with vendors or have been preliminarily approved by the Leadership Committee and State.

HSGP Acquisitions with Approved Funding Sources		
Description	Grant	Amount
Purchase forty-six (46) sets of "Chemical Protective Suits" for use as Modified Level-B for bomb technicians.	FY2005	\$4,107
Purchase eight (8) "Lighted Search Mirrors" one (1) for each bomb squad.	FY2005	\$2,680
Purchase eight (8) sets of "Digital x-ray Film Plates" one (1) for each bomb squad.	FY2005	\$2,400
Purchase six (6) "Replacement F6A Batteries" for six (6) of the bomb squads.	FY2005	\$2,758
Purchase eight (8) "Electronic Counter Measures" systems one (1) for each bomb squad.	FY2005	\$96,000
Joint "CoBRA Training" for thirty (30) members of Iowa's Bomb Squads and WMD Tactical Teams.	FY2006	\$10,000
Purchase eight (8) "Digital Radio System Upgrades" for the Remotec Andros F6-A Robots, one (1) for each bomb squad.	FY2007	\$480,000
Total		\$597,945

The following items have been identified by Iowa's (EOD) Bomb Squad Task Force Leadership Committee's strategic planning effort, as deficiencies and weaknesses in our current capabilities, for which a funding source has not been secured. The Leadership Committee will continue to pursue funding opportunities, but given current state and local budget constraints, federal Homeland Security Grant Program funds will likely be required to fulfill these needs.

Estimate of Future Resources Required over Three-Years (FY2008 - FY2010)	
Description	Amount

Purchase eight (8) "In-suit Communications Systems", one to be provided to each bomb squad to allow critical communications between technicians and commanders.	\$240,000
Conduct joint training and a progression of exercised response activities over three years, by the composite of all Iowa Emergency Response Teams.	\$250,000
Purchase eight (8) "Universal Blast Containment Systems and Sandia Foam", one system for each bomb squad to mitigate the potential effects during the disruption of a dirty-bomb.	\$320,000
Total	\$810,000

### The Future of Iowa's (EOD) Bomb Squad Task Force Program

Please note that while each bomb squad meets the minimum equipment and staffing requirements to remain accredited, there is disparity in the number of assigned technicians, equipment assets and levels of training, based on their respective agencies capabilities and program commitment.

The bar on national standards and certifications for bomb squads and bomb technicians continues to be raised. Potential threat elements are dynamic and continue to evolve with each counter-measure employed. Technological advancements are occurring at a record pace providing increased accuracy, operational efficiencies and increased capabilities.

Continued funding for sustainment and enhancement are a major concern, as the future of Homeland Security funding is uncertain. The diminishing federal and lack of state funding to support Bomb Squad Task Force Programs have and will increase financial burdens on each bomb squad. Funding for sustainment and enhancements will likely be borne by those jurisdictions recognizing the importance of the capabilities, and their ability to spread costs across the regions they serve.